

**REMARKS**

Claims 13, 15-17 and 19 were examined in the Office Action mailed August 11, 2005.

The claims stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of an article entitled "Marketing to a new generation" by Gary C. Wobler, U.S. Patent No. 6,211,782 to Sandelman, *et al.* and U.S. Patent No. 3,802,216 to Brandimarte.

In accordance with the Examiner's helpful suggestion, the Applicants have amended claim 19 to insert the missing word "method."

**1. The Pending Claims Are Patentable Over The Cited References.**

The Applicants respectfully traverse the pending § 103(a) rejection on the grounds that the references fail to teach or suggest all the features of the present invention for which they are cited, and thus no combination of these references would result in the invention recited in claim 13 and its dependent claims 15-17 and 19.

The Present Invention: As previously noted, the present invention is directed to a heating and cooling supply business method in which, *inter alia*:

- a user's lease fees are not based on the number of heating or cooling units provided or the price of the units, but on the user's total energy use; and
- an administrator, monitoring the use of the units over a network (*e.g.*, the Internet) determines whether the number of units and/or the capacity of individual units should be changed, based on the observed variation in the energy use.

The Specification notes that this method permits the unit mix to be optimized to ensure the units are operating in their peak efficiency ranges, and encourages

energy conservation by changing out inefficient units when appropriate, rather than keeping inefficiently units in place solely for accounting reasons (i.e., just because depreciation costs of user-owned units have not been fully amortized).

*See, e.g.*, Specification at 3:26-4:6; 6:3-12.

The Cited References: The Wobler article is cited as teaching: (i) providing heating or cooling equipment on a lease basis; (ii) identifying variations of heating and cooling usage of the installed equipment; and (iii) determining lease charges based on the identified variations. Wobler is acknowledged to not teach: (a) monitoring the installed equipment over the Internet; (b) determining on an administrator side whether to change the number and/or capacity of installed units; (c) administrator-directed installation of heating or cooling equipment; or (d) the use of portable heating or cooling equipment. August 11, 2005 Office Action at 2-3.

The Wobler article generally teaches the concept of leasing heat pumps to rural electric utility customers, with the equipment costs being integrated into the customer's power usage charges in order to make the heat pumps more affordable and attractive to customers. While Wobler describes the concept of "leasing heat pumps" to customers (Wobler at 1:17), the utility "maintaining ownership and ... installing the unit and providing service" similar to auto leases (Wobler at 2:17-20), and "receiving income from the lease as well as from the sale of energy" (Wobler at 2:34-35), the Applicants submit that nothing in Wobler teaches or suggests the claimed invention's unique approach to determining the lease charges for the units and administrator management of unit distribution.

The portion of Wobler cited as teaching “identifying variations of heating and cooling usage of the installed equipment” (Wobler at 2:24-26) in fact actually discusses how the *administrator* (the rural electric cooperative) recovers *its* costs for the units. Wobler at 21-28. Rather than “identifying variations” in the *actual* usage of *installed* equipment, Wobler uses *estimates* of the *expected* heating or cooling usage “based on [an industry] estimation procedure” to set a fixed surcharge to be added to the kWh rate charged to a customer – *for the sole purpose of determining how the Cooperative will recover its cost of the heat pump*. Wobler at 2:22-26 (“the equipment *cost* [is] embedded in the kWh charge *and is amortized over its expected life-cycle*”).

Once the amortization life and the Cooperative’s estimate of the amount of power the unit will consume over its life are determined (thereby determining the fixed kWh rate surcharge), no actual monitoring of the variations in actual heating or cooling use is taught or suggested by Wobler. In essence, Wobler teaches a business model in which the Cooperative sets a fixed rate surcharge, places a heat pump in the field, and then hopes that one or more customers ultimately use the unit enough over its life to ultimately recover the investment in the heat pump. There is simply no teaching or suggestion of administrator monitoring of unit use as part of any administrator evaluation as to whether a more efficient mix of units should be installed.

Another important distinction between the invention recited in claim 13 and Wobler, is that under the Wobler model, the amount a customer pays for the heat pump each month is not based on the customer’s *heating and cooling* power

use, but on the customer's *entire* power use, of which heating and cooling is but a fraction. There is nothing in Wobler which suggests any sort of separate metering of power supplied solely to the heat pump (nor would such separate monitoring be expected, given the Wobler article's focus on residential heat pump installations). Thus, while a fraction of the customer's monthly power bill will include charges attributable to the heat pump, the amount the customer is charged for the heat pump will be determined by the *total* amount of power used in their entire home or business. Wobler therefore also does not teach claim 13's varying the heat pump lease charges "based on the *monitored* total amount of *heating and cooling used* by the user from the leased units."

The deficiencies of Wobler are not cured by Sandelman and/or Brandimarte. Sandelman teaches little more than using the Internet to forward "exception messages" (*i.e.*, fault reports) from remote-monitored HVAC equipment to someone who can address the problem. *See, e.g.*, Sandelman Fig. 1 (showing messages sent from equipment 2-5 being forwarded via central server 1 to recipients 6-9); 1:22-37 and 2:14-39 (discussion of HVAC faults and need for forwarding messages to maintenance personnel); 3:10-22 (statement summarizing the invention immediately following discussion of need for fault reporting). There is no suggestion in this message-forwarding service for the remote monitoring of variations in heating or cooling use for any purpose, let alone for administrator management of unit mix to maximize efficiency. Nor is there any suggestion for setting lease rates based on a monitored amount of a customers actual heating or cooling use. Thus, the assertion that Sandelman

suggests the present invention's administrator control of unit numbers and/or capacity is unfounded, and can only result from hindsight use of "knowledge gleaned only from applicant's disclosure," contrary to MPEP § 2145.X.A.

The Office Action cites Sandelman at 4:28-29 as supporting the assertion that "[i]t would have been obvious ... to include providing recommendations regarding the appropriate type of equipment, as disclosed in Sandelman, because it would advantageously allow to prevent use of the equipment in excess of the design specification of the equipment ...." August 11, 2005 Office Action at 3. In fact, the cited sentence at lines 28-29 suggests no such thing, and one of ordinary skill reading Sandelman – *without* knowledge of the present invention – would perceive nothing in this reference suggesting monitoring of heating/cooling use for the purpose of making recommendations to optimize unit mix.

The sentence at 4:28-29 – read out of context – states: "An exception condition could also be indicative of a measured value being beyond the design specification for the equipment." In context, however, it is clear that this sentence is part of a paragraph devoted entirely to describing HVAC equipment monitoring to identify problems which need to be communicated to service personnel:

Equipment that needs to be monitored frequently, such as HVAC equipment, preferably operates within certain acceptable parameters. Some of these parameters are more crucial to the operation and/or life span of the equipment than are other parameters. For example, a low battery condition might be a lot less serious than a low coolant level condition. Whenever a piece of equipment operates outside its preferred parameters, an "exception" condition is created or said to exist. An exception condition can also be indicative of a regularly scheduled event occurring too often, too infrequently, or not at all. An exception

condition could also be indicative of a measured value being beyond the design specification for the equipment.

Asserting that the last sentence of this paragraph teaches the monitoring of heating/cooling equipment *for the purpose of determining whether to change out units to improve efficiency* can only be seen as an attempt to find a concept gleaned from the present application in a reference, without regard to what the reference would actually teach one of ordinary skill who did not possess knowledge of the present application. In this case, read in the context of the entire paragraph at Sandelman 4:17-29, one of ordinary skill would find no suggestion of either central management of HVAC equipment (exception messages are messages instead are merely forwarded to appropriate recipients, without substantive administrator involvement), nor find any suggestion of management of heating/cooling unit mix (centralized or otherwise) in a passage dealing only with identifying the types of “exception conditions” such as “low battery condition” or “low coolant level” needing to be forwarded by Sandelman’s remote notification system.

Sandelman thus fails both to cure the deficiencies of Wobler, or to teach the present invention’s administrator management of unit number and/or capacity for which Sandelman is cited.

Finally, for its part, Brandimarte’s discussion of its portable heating/air conditioning unit is devoid of any material pertinent to the features of claim 13 not taught or suggested by Wobler and/or Sandelman.

Because no combination of Wobler, Sandelman and/or Brandimarte teaches or suggests all the features of independent claim 13, and further because

no combination of these references would result in the claimed business method (due to Wobler's failure to teach or suggest the present invention's approaches to variation identification and lease rate setting), claim 13 and its dependent claims 15-17 and 19 are patentable over these references under § 103(a). Accordingly, reconsideration and withdrawal of the pending § 103(a) rejection is respectfully requested.

### CONCLUSION

In view of the foregoing amendments and remarks, the Applicants submit the pending claims are in condition for allowance, and respectfully request issuance of a Notice of Allowance for claims 13, 15-17 and 19.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #199.49908).

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Respectfully submitted,



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